

Severe Weather Watches by County

Statement of Issue

Phase I of the watch decentralization (Watch-by-County) will be implemented by June 2000.

Discussion

The goal of watch decentralization is to issue more explicit watch descriptions in time and space and allow local offices to clear portions of active watches as necessary. New watch related products will be created by Weather Forecast Offices (WFOs) and the Storm Prediction Center (SPC) as part of Phase I. A plan to test and implement Phase I has been drafted. Enclosed is a copy of the testing and implementation plan for Watch by County products. Also, a description and example of each product as well as its intended audience/purpose is provided.

Impacts/Input

We would appreciate feedback regarding the following questions. You might have additional areas of concern which we would be pleased to address.

- ▶ Does the plan for testing and implementation of Phase I products meet the needs of partners to adequately test local software?
- ▶ Are there partners who would like to take a pro-active role in providing direct feedback to WFOs and SPC?
- ▶ Does the product content contain the necessary watch related information to meet individual requirements?
- ▶ Do you have any questions regarding the intended purpose and audience for each Phase I product?
- ▶ What type of header information (UGC, VTEC, etc.) is needed in SPC watch products to ensure the best dissemination of relevant information?
- ▶ Will partners (especially non-visual media) be able to understand watch products using 6-sided polygons versus parallelograms?

Plan for Internal/External Field Testing and Implementation of Convective Watch Decentralization Phase I

4/1/99

Overview:

The National Weather Service proposes an incremental /simultaneous testing and implementation of convective watch decentralization (Phase I - Watch by County) products. This methodology will ensure an uninterrupted flow of standard watch products while new products are created, tested, and processed by software at Weather Forecast Offices (WFOs), Storm Prediction Center (SPC), and external NWS partners and customers.

Benefits:

- 1. SPC, WFOs, and external NWS partners could perform software tests as necessary. There would be no need to wait until a specific test date or implementation of a “severe weather scenario test” before capabilities of software to create and process Phase I products occurred.**
- 2. The Phase I test would be done in real time, coincident with the issuance of real convective watches. This would ensure constructive feedback along each step of testing from internal and external participants as well as certification of each product change before progressing to the next test or being implemented operationally.**
- 3. Incremental testing and implementation avoids having to re-do the test in case of failure or needed fine tuning. It also avoids delay in implementation of the comprehensive Phase I plan. Those parts of Phase I which could be completed early would be implemented as soon as possible to ensure operational implementation is well underway prior to the mandated deadline (June 2000).**
- 4. Real time testing would provide forecasters and partners real-time training using local software to create, ingest, and process Phase I products. This ensures more comprehensive feedback regarding use and performance of software to be used.**
- 5. WFO’s, SPC, and NWS partners would be involved in the testing process. Recommendations from participants could be addressed as received rather than a comprehensive list of recommendations delivered at once.**
- 6. Simultaneous issuance of Phase I and current (standard) watch products provides additional time to educate external users**

about Phase I products and make the transition to the updated product suite.

**Watch Decentralization - Phase I
Watch-By-County Operational Testing and Implementation Plan**

Proposed Date	Action	Purpose
July 1999	<p>SPC begins issuance of new product - internal county listing (SEV') (refer to Appendix for complete product listing), based on draft watch created on N-AWIPS. The SEV' is sent directly to WFOs affected by the watch. This county list would be generated from the area inscribed by a 4-sided watch parallelogram.</p> <p>WFO would ingest SEV' to display counties on AWIPS in the draft watch affecting their CWFA.</p> <p>SPC would use FTS2000 to test voice coordination capabilities and would make adjustments to the watch area based on the SPC-WFO discussion.</p> <p>SPC would issue standard suite of watch products including aviation watch (SAW), public watch narrative (SEL), traditional county listing (SEV), and radar corner point message (MKCSEVMKC).</p> <p>WFO would use Watch/Warning/Advisory software in AWIPS v4.2 to issue watch county re-define (SLS) based on coordination call with SPC.</p> <p>No change to procedures for issuing SPC Watch Status Messages (WWA) or WFO county watch clearance.</p>	<p>Test capability of SPC N-AWIPS software to create SEV' product and ingest into WFO AWIPS.</p> <p>Test/improve voice and graphical coordination procedures.</p> <p>Test WFO capability to issue SLS product using AWIPS.</p>

<p>August 1999</p>	<p>SPC begins hourly issuance of MKCSEVMKC*. This product would list the corner points of each active watch parallelogram as well as the watch number and expire time.</p> <p>Upon operational implementation, MKCSEVMKC* will be migrated to MCKSEVMKC.</p>	<p>Test capability of SPC software to issue hourly updates to the MKCSEVMKC* product.</p> <p>Test capability of NCO to ingest MKCSEVMKC* to update the location of active watches on the radar chart.</p> <p>This change would allow for cancellation and replacement of watches on the radar chart.</p>
<p>October 1999</p>	<p>SPC begins to collect WFO issued SLS products and issues the WOU.</p>	<p>Test capability of SPC software to collect SLS and issue WOU products at prescribed time interval (hourly?, TBD)</p> <p>Test partners ability to use WOU.</p>
<p>November 1999</p>	<p>Six to eight adjacent WFO's would be tasked to participate in a special Phase I test.</p> <p>Whenever an SPC watch is issued for WFO's participating in the special test, those offices would issue SLS <u>and</u> WCN products for county re-define.</p> <p>Other WFO's would continue issuing SLS only.</p> <p>SPC would collect SLS and WCN products to produce WOU and WOU'. The WOU would be generated using SLS products (as previous test) while WOU' is generated using WCN from participating offices. Time interval of issuance TBD.</p>	<p>Test ability for WFO to issue WCN products from AWIPS.</p> <p>Test ability for SPC to ingest WCN products and create WOU'.</p> <p>Test partners ability to use WCN.</p>

<p>January 2000</p>	<p>Six to eight adjacent WFO's continue to participate in special Phase I test.</p> <p>SPC will begin issuance of 4-point AND 6-point watches in areas participating in the special Phase I test. The 4-point watch would be the standard parallelogram watch (each point represents a corner point of the watch box). The 6-point watch would also be a parallelogram with two additional points along the border of the box. Both watches would circumscribe the same area and the SEV' generated would remain be the same.</p> <p>SPC will issue standard SAW, SEL, and SEV and MKCSEVMKC watch products.</p> <p>SPC will begin issuance of new SAW' and SEL' products.</p>	<p>Test ability of SPC software to create new SAW' and SEL' watch products using 6-vertices.</p> <p>Test partners ability to use SEL' and SAW' products.</p> <p>Areas circumscribed by 4-point and 6-point watches would be the same so the SEV' used by AWIPS to create the WCN would not be affected.</p>
<p>March 2000</p>	<p>All WFO's begin issuance of WCN.</p> <p>WFO's discontinue (or issue in dual role) SLS.</p> <p>SPC discontinues issuance of SEV county listing. Only SEV' issued for AWIPS and internal coordination purposes.</p> <p>SPC migrates WOU' to WOU and discontinues WOU'.</p> <p>SPC continues issuance of MKCSEVMKC (4-point radar chart message) AND begins issuance of MKCSEVMKC* (6-point radar chart message).</p>	<p>Official watch-by-county implemented. All WFO's begin issuance of WCN.</p> <p>SPC / NCO tests ability to create/ingest 6-point MKCSEVMKC for radar chart.</p>

<p>June 2000</p>	<p>SPC begins rubber banding of 6-sided polygons that circumscribe active watch areas for radar chart.</p> <p>SPC migrates MKCSEVMKC* to MKCSEVMKC and discontinues MKCSEVMKC*.</p> <p>Watch Decentralization - Phase I operationally implemented.</p> <p>SPC continues to issue standard and new product suite until the end of the convective season and external evaluation (TBD).</p>	<p>Test ability for SPC to create updated polygons circumscribing watch areas using 6-points for the radar chart.</p> <p>Determine if automated watch rubber banding software is sufficient for operational / partner needs.</p> <p>If manual intervention is required for rubber banding watch areas, determine if SPC staff is adequate.</p> <p>Dual issuance of standard and new watch product suite to continue pending SPC/OM decision.</p>
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Appendix: Watch Decentralization Product Reference List

The following list of products are planned for use during the transition of watch issuance from current form to final Phase I implementation. Specific information on product examples and formats can be obtained from Mike Heathfiled, (Chairman, Watch Decentralization Product Format Team) on the OM web page (<http://tgs5.nws.noaa.gov/om/hotopics.htm>).

Product Acronym	Product Name	Description	Primary User
MCD	Mesoscale Discussion	SPC technical discussion regarding areas of hazardous mesoscale weather or locations which may require a severe thunderstorm/tornado watch in the next few hours.	WFOs, General
SAW	Aviation Watch	Current (Pre-Phase I) SPC technical product containing watch type, number, states affected, duration, aviation coordinates (4-points), max hail size, max wind gusts, max thunderstorm tops, mean storm motion vector, lat/long points of the watch box corners.	Aviation Interests
SAW'	Aviation Watch Phase I	Phase I SPC technical product containing watch type, number, states affected, duration, aviation coordinates (6-points), max hail size, max wind gusts, max thunderstorm tops, mean storm motion vector, lat/long points of the watch box corners. Eventually this product will be migrated into SAW.	Aviation Interests
SEL	Public Watch	Current (Pre-Phase I) SPC product providing a plain language description of the watch number, type, duration, areas affected (described in text and using 4-points), primary threats, and a meteorological discussion.	WFOs, General

SEL'	Public Watch Phase I	Phase I SPC product providing a plain language description of the watch number, type, duration, areas affected (described in text and using 6-points), primary threats, and a meteorological discussion. Eventually, this product will be migrated into SEL.	WFOs, General, TEST ONLY
SEV	SPC County Listing	Current (Pre-Phase I) SPC product listing counties included in an SPC watch.	WFOs, General
SEV'	SPC County Listing Phase I	Phase I SPC product listing counties included in an SPC draft watch. This product is used by AWIPS to create the WCN and for coordination between SPC and WFOs. Eventually, this product will be migrated into SEV.	WFOs ONLY TEST ONLY
SLS	WFO County Re-Define	Current (Pre-Phase I) WFO product used to re-define (list counties) the watch in their CWFA.	General
MKCSEVMKC	Radar Corner Point Message	Current (Pre-Phase I) SPC technical product containing watch number, type, duration, and latitude/longitude points of the 4 corners of the watch parallelogram. Issued only at initial watch issuance time.	NCO
MKCSEVMKC*	Radar Corner Point Message Phase I	Phase I SPC technical product containing watch number, type, duration, and latitude/longitude points of the 4 corners of the watch parallelogram (initially). After March 2000, the 4-point descriptions will be replaced by 6-point descriptions. Issued at watch issuance time, updated hourly. Eventually this product will be migrated into MKCSEVMKC.	NCO, TEST ONLY

WWA	Watch Status Message	SPC technical product providing a discussion of the threat for severe weather within an active watch. Also used to recommend areas where severe weather threat has ended.	WFOs, General
WOU	Watch Outline Update Message	Phase I SPC product containing active watch number, type, and listing of all counties included. Initially created using SLS products, later using WCN products	General
WOU'	Watch Outline Update Message TEST	Test product issued by SPC product containing active watch number, type, and listing of all counties included. using WCN products. Eventually this product will be migrated into WOU.	TEST ONLY
WCN	Watch County Notification	Phase I WFO product used to list counties included in a watch for all or portions of a CWFA. Also used to clear counties from or cancel a watch.	General

SPC ALPHANUMERIC PRODUCTS

for Phase I - Convective Watch Decentralization

4/1/99

The SPC alphanumeric products to be produced during Phase I of Convective Watch Decentralization are listed below. Product examples are also included. Header formats in product examples will be changed to meet AWIPS communications and transmission requirements.

1. MESOSCALE DISCUSSIONS (0-3 h):
TEXT: MKCSWOMCD
2. AVIATION WEATHER [SEVERE THUNDERSTORM / TORNADO] WATCH (0-6 h):
TEXT: MKCSAW#
3. PUBLIC SEVERE THUNDERSTORM AND TORNADO WATCHES (0-6 h):
TEXT: MKCSEL#
4. SPC CONVECTIVE WATCH COUNTY LISTING (0-6 h):
TEXT: MKCSEV#
5. SPC RADAR CORNER POINT MESSAGE (updated hourly):
TEXT: MKCSEVMKC
6. CONVECTIVE WATCH STATUS MESSAGE (0-3 h):
TEXT: MKCWWAMKC
7. WATCH OUTLINE UPDATE MESSAGE (updated hourly):
TEXT: MKCWOU#

Product #1: Mesoscale Discussion (MCD)
Product Category: MKCSWOMCD
Graphic: Available on the SPC Web Site

Purpose:

The Mesoscale Discussion is a short-term technical product written in plain language (with universally understood contractions) that communicates the current judgment of SPC regarding the potential for hazardous weather on the mesoscale (convection, winter weather, etc.) The forecast duration of this product is 0-3 h for convective phenomena and 0-9 h for winter weather (primary focus in winter weather is 0-6h). This product will expand it's content including information on a variety of mesoscale phenomena.

Intended Audience:

The MCD is intended for meteorologists and other knowledgeable customers.

Brief Description:

The MCD is a brief product (generally less than 25 lines of narrative). It is a terse, technical discussion aimed at describing convective or hazardous weather potential for the next several hours. In many cases, the MCD will precede a severe thunderstorm or tornado watch and will also serve as a basis for coordination between the SPC and WFOs in the affected areas. The state UGC code is provided in the header of the product.

MESOSCALE DISCUSSION (MCD):

4/1/99

MKCSWOMCD
ACUS03 KSPC 251748
SPC MCD 251748
TXZ000-252300-

**SPC MESOSCALE DISCUSSION #234 FOR... SOUTHEASTERN TEXAS
CONCERNING...SEVERE THUNDERSTORM POTENTIAL...**

**CONVECTION CONTINUES TO SLOWLY INCREASE OVER PARTS OF
SOUTHEASTERN TEXAS AND ADJACENT GULF WATERS OVER THE PAST FEW
HOURS. WAVE IMAGERY INDICATED A SHORT WAVE TROUGH WITH
ASSOCIATED DRY MID LEVEL AIRMASS WAS NEARING THE TEXAS COASTAL
BEND AT THIS MOMENT...WHERE THE AIRMASS HAD BECOME MODERATELY
UNSTABLE. CURRENT SURFACE BASED LIFTED INDICES RANGED FROM -3 TO
-6. LATEST DOPPLER IMAGERY FROM CORPUS CHRISTI AND HOUSTON-
GALVESTON INDICATED ACTIVITY NEARING THE TEXAS COAST SOUTHEAST
OF MATAGORDA COUNTY HAS PERSISTENT WEAK MID LEVEL ROTATION.
CURRENT VAD WIND PROFILES SUPPORT EARLIER MODELS IN INCREASING
UPPER LEVEL SOUTHWESTERLY FLOW ASSOCIATED WITH SHORT WAVE
WHICH WILL LIKEWISE INCREASE DEEP LAYER SHEAR ACROSS THIS REGION
OVER THE NEXT SEVERAL HOURS.**

**WARM FRONT LOCATED ACROSS SOUTHERN TEXAS/NORTHWESTERN GULF
OF MEXICO SHOULD LIFT NORTHWARD THIS AFTERNOON...WHILE NUMEROUS
MESOSCALE COASTAL/OUTFLOW BOUNDARIES PERSIST ACROSS THIS AREA.
THIS SHOULD ALLOW CONVECTION TO BECOME NEAR SURFACE
BASED...INCREASING POTENTIAL FOR ISOLATED TORNADOES.**

**IF THUNDERSTORMS CONTINUE TO INCREASE...A WEATHER WATCH MAY BE
NEEDED IN THE NEXT HOUR OR SO.**

**FOR GRAPHICAL REPRESENTATION OF THE DISCUSSION AREA, SEE
INTERNET GRAPHIC: <http://www.nssl.noaa.gov/~spc/products/meso/>**

..EVANS.. 10/25/98

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Product #2: Aviation Weather Watch (SAW)
Product Category: MKCSAW(0-9)
GRAPHICS: None

Purpose:

To provide brief, specific information regarding the issuance of a SEVERE THUNDERSTORM or TORNADO watch. This product is primarily used by the aviation community.

Intended Audience:

NWS Forecast Offices, other National Centers, and commercial weather information consumers (especially aviation interests)

Brief Description:

The SAW is a terse description of a convective watch. It supplies the reader with the weather watch number, the type of watch (tornado or severe thunderstorm), the states involved, valid times, and in particular the 6-end points that circumscribe the watch area. Those end points are provided both in aviation coordinates and latitude/longitude. In addition, the reader is given specific elements expected with the severe weather: hail size, thunderstorm wind gusts, mean storm motion vector, and maximum thunderstorm tops. The reader is then directed to the public watch narrative (MKCSEL#) for further details.

AVIATION WEATHER WATCH (SAW)

4/1/99

MKCSAW2

WWUS40 KSPC 261705

SPC AWW 261705

WW #1002 TORNADO TX AR LA 261730Z - 270100Z

AVIATION COORDS..38WNW GGG..35NW TXK..5W FSM..59NNE LIT

..23N MLU..39SW MLU..38WNW GGG

HAIL SURFACE AND ALOFT..2 INCHES. WIND GUSTS..60 KNOTS.

MAX TOPS..550. MEAN STORM MOTION VECTOR..25040.

FOR FURTHER DETAILS ... REFER TO MKCSEL2.

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Product #3: Public Watch Narrative (SEL)
Product Category: MKCSEL(0-9)
GRAPHICS: None

Purpose:

The SEL announces that there is a threat for severe thunderstorms and/or tornadoes in or near a defined area during a prescribed interval of time. It identifies whether the threat is of severe thunderstorms or tornadoes.

Intended Audience:

The SEL is designed for use by all members of the community including the public.

Brief Description:

The SEL is structured to provide a variety of information, both technical and non-technical, in a plain-language narrative of 6 paragraphs.

The first paragraph of the narrative gives a general description of what the threat is and where it is, geographically. It also provides the valid time of the watch, and then gives enhanced wording if the situation is particularly dangerous.

Four paragraphs that follow supply the reader with more specific details about expected conditions. The first of these gives potential hail size, maximum wind speeds in thunderstorm wind gusts, threat for dangerous lightning, and recommended preparedness procedures. The next paragraph is preceded with the phrase "OTHER WATCH INFORMATION" and lists all active convective watches as well as whether this watch is replacing a previously issued watch. The next paragraph is preceded by the term "DISCUSSION" and is a technical synopsis of the meteorological conditions leading to the threat. The last of these three paragraphs is preceded by the term "AVIATION" and pertains to specific aviation related data.

The final paragraph refers the reader to statements from WFOs that list counties included in the watch.

SPC PUBLIC WATCH NARRATIVE (SEL)

4/1/99

**MKCSEL2
WWUS09 KSPC 261705
SPC WW 261705
TXZ000-ARZ000-LAZ000-270100-**

**URGENT - IMMEDIATE BROADCAST REQUESTED
TORNADO WATCH #1002
STORM PREDICTION CENTER NORMAN OK
1205 PM CDT SUN MAY 26 1998**

**THE STORM PREDICTION CENTER HAS ISSUED A
TORNADO WATCH FOR PORTIONS OF:**

**NORTHEASTERN TEXAS
NORTHERN LOUISIANA
ARKANSAS**

EFFECTIVE THIS SUNDAY AFTERNOON AND EVENING FROM 1230 PM UNTIL 7 PM CDT.

...{option for enhanced wording to describe particularly dangerous situation}...

THE TORNADO WATCH AREA IS DEFINED TO THE RIGHT OF A LINE FROM 75 WNW OF SHREVEPORT, LA...TO 40 NW OF TEXARKANA, AR...TO 5 W OF FORT SMITH, AR...TO 45 NNE OF LITTLE ROCK, AR...45 ESE OF EL DORADO, AR...TO 60 E OF SHREVEPORT, LA...TO 75 WNW OF SHREVEPORT, LA.

A TORNADO WATCH MEANS CONDITIONS ARE FAVORABLE FOR SEVERE THUNDERSTORMS AND TORNADOES IN AND CLOSE TO THE WATCH AREA. THUNDERSTORMS IN THE WATCH AREA ALSO MAY PRODUCE HAIL UP TO 2 INCHES IN DIAMETER...DAMAGING WIND GUSTS TO 70 MPH... AND DANGEROUS LIGHTNING {text variable according to situation}. PERSONS IN THESE AREAS SHOULD BE ON THE LOOKOUT FOR THREATENING WEATHER CONDITIONS AND LISTEN FOR LATER STATEMENTS AND POSSIBLE WARNINGS.

OTHER WATCH INFORMATION...THIS TORNADO WATCH REPLACES SEVERE THUNDERSTORM WATCH NUMBER 1000. WATCH NUMBER 1000 WILL NOT BE IN EFFECT AFTER 1 PM CDT. CONTINUE WW 999..WW 1001...{optional according to situation}

DISCUSSION ... RAPID THUNDERSTORM DEVELOPMENT IN NORTHEAST TEXAS EXPECTED TO CONTINUE IN AXIS OF BEST SURFACE CONVERGENCE AND INSTABILITY. THUNDERSTORMS EXPECTED TO BUILD NORTH AND MOVE EAST SOUTHEAST ACROSS DEW POINT AXIS IN RESPONSE TO WEAK UPPER LEVEL IMPULSE. AIR MASS UNSTABLE WITH LIFTED INDICES OF MINUS 10. FAVORABLE VERTICAL WIND PROFILE WILL SUPPORT ISOLATED SUPERCELLS WITH POSSIBLE TORNADOES.

AVIATION ... A FEW SEVERE THUNDERSTORMS AND TORNADOES WITH HAIL SURFACE AND ALOFT TO 2 INCHES ... EXTREME TURBULENCE AND SURFACE WIND GUSTS TO 60 KNOTS. A FEW CUMULONIMBI WITH MAXIMUM TOPS TO 550. MEAN STORM MOTION VECTOR 25040.

...GALWAY

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Product 4	SPC Convective Watch County Listing (SEV)
Product Category:	MKCSEV(0-9)
GRAPHIC:	None

Purpose:

To provide a proposed listing of counties included in a **SEVERE THUNDERSTORM** or **TORNADO** watch for NWS Forecast Offices.

Intended Audience:

Internal NWS WFO

Brief Description:

The SEV Consists of two principal components: watch identification, and list of proposed counties to be included (sorted by state) in a watch. The watch identification is in the product header, stating the type of watch, its watch number and its expiration time. The county listing is an alphabetical listing of counties, by state.

This product will be used by WFO/AWIPS software to generate WCN products.

SPC CONVECTIVE WATCH COUNTY LISTING (SEV):

4/1/99

MKCSEV2

WOUS51 KSPC 261705

SPC WWC 261705

**.TORNADO WATCH #1002 HAS BEEN ISSUED BY THE STORM PREDICTION
CENTER EFFECTIVE THIS SUNDAY AFTERNOON AND EVENING FROM 12:30 PM
UNTIL 7:00 PM CDT.**

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. ARKANSAS COUNTIES INCLUDED ARE

BRADLEY	CALHOUN	CLARK
CLEVELAND	COLUMBIA	CONWAY
DALLAS	FAULKNER	GARLAND
GRANT	HEMPSTEAD	HOT SPRING
HOWARD	JEFFERSON	LAFAYETTE
LITTLE RIVER	LOGAN	LONOKE
MILLER	MONTGOMERY	NEVADA
OUACHITA	PERRY	PIKE
POLK	PULASKI	SALINE
SCOTT	SEBASTIAN	SEVIER
UNION	WHITE	YELL

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LA

. LOUISIANA PARISHES INCLUDED ARE

BIENVILLE	BOSSIER	CADDO
CLAIBORNE	LINCOLN	UNION
WEBSTER		

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TX

. TEXAS COUNTIES INCLUDED ARE

BOWIE	CAMP	CASS
HARRISON	MARION	MORRIS
UPSHUR		

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**Product #5
(MKCSEVMKC)**

**Product Category:
GRAPHIC:**

SPC Watch Point Information

**MKCSEVMKC
None**

Purpose:

**To provide a listing of all active severe thunderstorm and/or
tornado watches in effect.**

Intended Audience:

**NWS/NCO for display of active watches on the radar chart.
Other users who require regular (hourly, TBD) updates of
watch areas.**

Brief Description:

**The MKCSEVMKC provides a brief listing of the type of
watch, watch number, expiration time and
latitude/longitude locations of 6 vertices which describe the
watch area.**

**This product is primarily used by NCO to produce active
watch polygons on the radar chart.**

SPC WATCH POINT INFORMATION MESSAGE (MKCSEVMKC):

4/1/99

**MKCSEVMKC
WOUS50 KSPC 261801
FILE CREATED 26-NOV-97 AT 17:05:03 UTC**

**SEVR 971126 1801 WT0792 2300
02903.09250 03135.09136 03135.08822 02903.08941;**

**SEVR 971126 1801 WT0793 0000
02957.08911 03248.08751 03248.08456 02957.08621;**

Product #6: Convective Watch Status Message (WWA)
Product Category: MKCWWAMKC
GRAPHIC: None

Purpose:

To give an assessment of convective development and evolution within a convective watch.

Intended Audience:

Meteorologists and other knowledgeable customers.

Brief Description:

The Status Message is a brief, terse, plain language technical discussion, two to three paragraphs in length. The WWA consists of a brief nowcast, a short term forecast, and an assessment of what will be done with the watch (and if further watches are anticipated or will be required). The state UGC code is provided in the header of the product.

SPC WATCH STATUS MESSAGE (WWA):

4/1/99

**MKCWWAMKC
NWUS08 KSPC 262305
SPC WWA 262305
TXZ000-ARZ000-LAZ000-270100-**

STATUS REPORT ON WW #1002

SUPERCELLS DEVELOPING IN NORTHEASTERN TEXAS CONTINUE HEADING 250/16 KT TOWARD SOUTHWESTERN ARKANSAS AND NORTHWESTERN LOUISIANA. RECENT VOLUME SCANS HAVE SHOWN STRONG AND INCREASING MID-LEVEL ROTATIONAL VELOCITIES WITH THESE STORMS AND A TORNADO WAS REPORTED IN BOWIE COUNTY IN THE PAST HOUR.

APPEARS THAT THE SEVERE WEATHER THREAT FOR THE NEXT SEVERAL HOURS WILL BE CONFINED TO EXTREME NORTHEASTERN TX...SOUTHERN AR...AND NORTHERN LA. WARM FRONTAL BOUNDARY NOT EXPECTED TO PUSH MUCH FARTHER NORTH OVER ARKANSAS THIS AFTERNOON. ENHANCED SURFACE COOL POCKET DUE TO EFFECTS OF PREVIOUS CONVECTION AND FRONTOGENESIS OVER WESTERN LA WILL KEEP BEST INSTABILITY CONFINED TO THESE AREAS.

WEATHER WATCH WILL CONTINUE THROUGH 0100 UTC EXPIRATION TIME. WARM SECTOR WILL BE CLOSELY MONITORED DURING REST OF THE EVENING FOR SIGNS OF EASTWARD ADVANCEMENT.

..CRAVEN.. 5/26/98

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Product #7:	Watch Outline Update Message (WOU)
Product Category:	MKCWOU#
GRAPHICS:	None

Purpose:

To provide NCO and other users with updated listings of all counties in an active watch updated hourly (TBD). This will be created through a collection of WCN products issued by WFO's affected by an active watch.

Intended Audience:

NCO and other knowledgeable customers.

Brief Description:

The Watch Outline Update Message (WOU) is a brief, non-technical product which provides a listing of all counties in an active watch based on information contained in WCN products issued from WFO's. This product is issued hourly to provide a single location for users to obtain a list of all counties included in an active watch. (Users who desire instantaneous updates of counties removed from active watches should refer to individual WCN products issued by WFO's).

The watch number, type of watch, and list of all counties sorted by state, are provided along with a UGC header. This product is scheduled to be automatically generated at the initial issuance of the watch and at T+50 after each hour whenever active convective watches are in effect. Individual WOU products will be issued for each active convective watch.

WATCH OUTLINE UPDATE MESSAGE (WOU):

4/1/99

MKCWOU2
WOUS52 KSPC 262320
SPC WOU 262320

WW #1002 TORNADO WATCH OUTLINE UPDATE
AS OF 5:50 PM CDT...TORNADO WATCH #1002 REMAINS IN EFFECT UNTIL 7:00
PM CDT FOR THE FOLLOWING LOCATIONS:

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ARC011-013-019-025-027-039-051-053-057-059-061-069-073-081-085-091-097-099-
103-105-109-113-119-125-127-133-139-149-LAC013-015-017-027-061-111-119-
TXC037-063-067-203-315-343-459-270100-

AR
. ARKANSAS COUNTIES INCLUDED ARE

BRADLEY	CALHOUN	CLARK
CLEVELAND	COLUMBIA	DALLAS
GARLAND	GRANT	HEMPSTEAD
HOT SPRING	HOWARD	JEFFERSON
LAFAYETTE	LITTLE RIVER	LONOKE
MILLER	MONTGOMERY	NEVADA
OUACHITA	PERRY	PIKE
POLK	PULASKI	SALINE
SCOTT	SEVIER	UNION
YELL		

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LA
. LOUISIANA PARISHES INCLUDED ARE

BIENVILLE	BOSSIER	CADDO
CLAIBORNE	LINCOLN	UNION
WEBSTER		

\$\$

TX
. TEXAS COUNTIES INCLUDED ARE

BOWIE	CAMP	CASS
HARRISON	MARION	MORRIS
UPSHUR		

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WFO ALPHANUMERIC PRODUCTS

for Phase I - Convective Watch Decentralization

4/1/99

Purpose:

Future WFO Products for the purpose of issuing, clearing, and canceling convective watches in the WFO's CWA.

Intended Audience:

These products are intended for use in local and national meteorological applications for both the public and private sectors.

Brief Description:

The body of the product is composed of three segments the first is a list of UGC codes for areas being cleared or canceled with respect to the watch and the second is the list of UGC codes for areas where the watch is in effect. The third segment of the body of the product contains a brief call to action statement.

The first two segments of the WCN each contain a UGC listing of the appropriate areas. The segments, in the body of the WCN, are separated by a "\$\$" after the listing of areas that are being cleared or canceled and after the list of areas where the watch is in effect.. In the cases of, initial watch issuance, or where the watch has been canceled or cleared the UGC codes are listed as 999 to indicate a null set for that portion of the product.

Three formats have been developed to accommodate regional and local format preferences. The first format, "area off" is a listing of counties by state with a list of some of site defined cities included in the watch after the list of counties. The second format is "area on", "area city off", this format separates the counties included in the watch into site defined sub-parts of states and provides a consolidated, site defined list of cities, after all of the sub-part county lists. The third format is the "area on", "city area on". The third format separates the watch into, site defined sub-parts of states and immediately after each sub-part of state list is the site defined list of cities that are located in that respective sub-part of the state.

**WATCH COUNTY NOTIFICATION (WCN)
FORMAT 1: "AREA OFF"**

PURPOSE I: ISSUING

**ZCZC ARBWCNGRR
TTAA00 KGRR 121445**

**WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #42
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
945 AM EST WED FEB 12 1997**

MIC999-INC999-OHC999-LMC999-122000-

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**MIC005-015-067-081-107-117-121-123-127-139-122000-
THE NATIONAL WEATHER SERVICE HAS ISSUED A SEVERE THUNDERSTORM
WATCH IN EFFECT UNTIL 300 PM EST WEDNESDAY FOR THE FOLLOWING
COUNTIES:**

IN MICHIGAN:

ALLEGAN	BARRY	IONIA
KENT	MECOSTA	MONTCALM
MUSKEGON	NEWAYGO	OCEANA
OTTAWA		

**THIS INCLUDES THE CITIES OF...MUSKEGON...GRAND HAVEN...GRAND RAPIDS...AND
HOLLAND**

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**A SEVERE THUNDERSTORM WATCH MEANS SEVERE THUNDERSTORMS ARE
POSSIBLE IN AND NEAR THE WATCH AREA. BE ON THE WATCH FOR THREATENING
WEATHER AND LISTEN TO NOAA WEATHER RADIO... COMMERCIAL RADIO OR
TELEVISION FOR FURTHER INFORMATION.**

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PURPOSE II: CLEARING

**ZCZC ARBWCNGRR
TTAA00 KGRR 131849 AMD**

**WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #43
...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
149 PM EST THU FEB 13 1997**

**MIC005-015-081-139-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED A PORTION OF SEVERE THUNDERSTORM WATCH #42.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:**

IN MICHIGAN:

**ALLEGAN BARRY KENT
OTTAWA**

THIS INCLUDES THE CITIES OF...GRAND HAVEN...GRAND RAPIDS...AND HOLLAND

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**MIC021-027-077-159-132200-
SEVERE THUNDERSTORM WATCH #43 REMAINS VALID UNTIL 500 PM EST
THURSDAY FOR THE FOLLOWING COUNTIES:**

IN MICHIGAN:

**BERRIEN CASS KALAMAZOO
VAN BUREN**

THIS INCLUDES THE CITIES OF...KALAMAZOO...AND BENTON HARBOR

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PURPOSE III: CANCELLATION

**ZCZC ARBWCNGRR
TTAA00 KGRR 131852 AMD**

**WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #34
...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
152 PM EST THU FEB 13 1997**

**MIC005-015-021-025-027-077-159-132000-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED ALL COUNTIES REMAINING IN SEVERE THUNDERSTORM WATCH #34
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:**

IN MICHIGAN:

ALLEGAN	BARRY	BERRIEN
CALHOUN	CASS	KALAMAZOO
VAN BUREN		

**THIS INCLUDES THE CITIES OF...HOLLAND...KALAMAZOO...BATTLE CREEK... AND
BENTON HARBOR**

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MIC999-INC999-OHC999-LMC999-132000-

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**WATCH COUNTY NOTIFICATION (WCN)
FORMAT 2: AREA "ON" AREA CITY "OFF"**

PURPOSE I: ISSUING

**ZCZC ARBWCNGRR
TTAA00 KGRR 121452**

**WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORMS WATCH #47
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
952 AM EST WED FEB 12 1997**

MIC999-INC999-OHC999-LMC999-122000-

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**MIC005-015-021-023-025-027-045-067-077-081-107-117-121-123-127-139-
149-159-122000-**

**THE NATIONAL WEATHER SERVICE HAS ISSUED A SEVERE THUNDERSTORM
WATCH IN EFFECT UNTIL 300 PM EST WEDNESDAY FOR THE FOLLOWING
COUNTIES:**

IN CENTRAL COASTAL MICHIGAN:

MUSKEGON OCEANA OTTAWA

IN WEST CENTRAL MICHIGAN:

**IONIA KENT MECOSTA
MONTCALM NEWAYGO**

IN CENTRAL MICHIGAN:

EATON

IN SOUTHWEST COASTAL MICHIGAN:

**ALLEGAN BERRIEN CASS
VAN BUREN**

IN SOUTH CENTRAL MICHIGAN:

**BARRY BRANCH CALHOUN
KALAMAZOO ST JOSEPH**

**THIS INCLUDES THE CITIES OF...MUSKEGON...GRAND HAVEN...GRAND
RAPIDS...HOLLAND...KALAMAZOO...BATTLE CREEK...AND BENTON HARBOR**

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PURPOSE II: CLEARING

**ZCZC ARBWNCGRR
TTAA00 KGRR 131841 AMD**

**WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #48
...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
141 PM EST THU FEB 13 1997**

**MIC067-081-121-139-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED A PORTION OF SEVERE THUNDERSTORM WATCH #48.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:**

**IN CENTRAL COASTAL MICHIGAN:
MUSKEGON OTTAWA**

**IN WEST CENTRAL MICHIGAN:
IONIA KENT**

THIS INCLUDES THE CITIES OF...MUSKEGON...GRAND HAVEN...AND GRAND RAPIDS

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**MIC005-015-077-159-132200-
SEVERE THUNDERSTORM WATCH #48 REMAINS VALID UNTIL 500 PM EST
THURSDAY FOR THE FOLLOWING COUNTIES:**

**IN SOUTHWEST COASTAL MICHIGAN:
ALLEGAN VAN BUREN**

**IN SOUTH CENTRAL MICHIGAN:
BARRY KALAMAZOO**

THIS INCLUDES THE CITIES OF...HOLLAND...AND KALAMAZOO

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PURPOSE III: CANCELING

**ZCZC ARBWCNGRR
TTAA00 KGRR 131843 AMD**

**WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #32
...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
143 PM EST THU FEB 13 1997**

**MIC005-015-077-159-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED ALL COUNTIES REMAINING IN SEVERE THUNDERSTORM WATCH #32.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:**

**IN SOUTHWEST COASTAL MICHIGAN:
ALLEGAN VAN BUREN**

**IN SOUTH CENTRAL MICHIGAN:
BARRY KALAMAZOO**

THIS INCLUDES THE CITIES OF...HOLLAND...AND KALAMAZOO

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MIC999-INC999-OHC999-LMC999-132200-

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**WATCH COUNTY NOTIFICATION (WCN)
FORMAT 3: AREA "ON" AREA CITY "ON"**

PURPOSE I: ISSUING

**ZCZC ARBWCNGRR
TTAA00 KGRR 131723**

**WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #34
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
1223 PM EST THU FEB 13 1997**

MIC999-INC999-OHC999-LMC999-132000-

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**MIC005-021-027-067-081-117-121-123-139-159-132000-
THE NATIONAL WEATHER SERVICE HAS ISSUED A SEVERE THUNDERSTORM WATCH IN
EFFECT UNTIL 300 PM EST THURSDAY FOR THE FOLLOWING COUNTIES:**

**IN CENTRAL COASTAL MICHIGAN:
MUSKEGON OTTAWA**

THIS INCLUDES THE CITIES OF...MUSKEGON...AND GRAND HAVEN

**IN WEST CENTRAL MICHIGAN:
IONIA KENT MONTCALM
NEWAYGO**

THIS INCLUDES THE CITY OF GRAND RAPIDS

**IN SOUTHWEST COASTAL MICHIGAN:
ALLEGAN BERRIEN CASS
VAN BUREN**

THIS INCLUDES THE CITIES OF...HOLLAND...AND BENTON HARBOR

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PURPOSE II: CLEARING

**ZCZC ARBWCNGRR
TTAA00 KGRR 131815 AMD**

**WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #33 ...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
115 PM EST THU FEB 13 1997**

**MIC067-081-121-139-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED A PORTION OF SEVERE THUNDERSTORM WATCH #33.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:**

**IN CENTRAL COASTAL MICHIGAN:
MUSKEGON OTTAWA**

THIS INCLUDES THE CITIES OF...MUSKEGON...AND GRAND HAVEN

**IN WEST CENTRAL MICHIGAN:
IONIA KENT**

THIS INCLUDES THE CITY OF GRAND RAPIDS

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**MIC021-023-025-027-077-149-159-132200-
SEVERE THUNDERSTORM WATCH #33 REMAINS VALID UNTIL 500 PM EST THURSDAY
FOR THE FOLLOWING COUNTIES:**

**IN SOUTHWEST COASTAL MICHIGAN:
BERRIEN CASS VAN BUREN**

THIS INCLUDES THE CITY OF BENTON HARBOR

**IN SOUTH CENTRAL MICHIGAN:
BRANCH CALHOUN KALAMAZOO
ST JOSEPH**

THIS INCLUDES THE CITIES OF...KALAMAZOO...AND BATTLE CREEK

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PURPOSE III: CANCELING

**ZCZC ARBWCNGRR
TTAA00 KGRR 131821 AMD**

**WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #39 ...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
121 PM EST THU FEB 13 1997**

**MIC021-023-025-027-077-149-159-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED ALL COUNTIES REMAINING IN SEVERE THUNDERSTORM WATCH #39.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:**

**IN SOUTHWEST COASTAL MICHIGAN:
BERRIEN CASS VAN BUREN**

THIS INCLUDES THE CITY OF BENTON HARBOR

**IN SOUTH CENTRAL MICHIGAN:
BRANCH CALHOUN KALAMAZOO
ST JOSEPH**

THIS INCLUDES THE CITIES OF...KALAMAZOO...AND BATTLE CREEK

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MIC999-INC999-OHC999-LMC999-132200-

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Experimental Probabilistic Severe Thunderstorm Outlooks

Issue

The Storm Prediction Center (SPC) is proposing to modify Day 1 and Day 2 convective outlooks.

Discussion

SPC issues Day 1 and Day 2 convective outlooks using categories for SLIGHT, MODERATE, and HIGH risks of severe convection (reference <http://www.spc.noaa.gov/products/index.html>). The definitions for these categories are based on aerial coverage of severe weather. At the present time, these graphical products do not explicitly illustrate the threat of specific severe weather phenomena or the potential for “significant severe” weather (i.e. hail greater than 2 inches in diameter, convective winds greater than 75 mph, and/or F2 or greater intensity tornadoes).

SPC is proposing to modify Day 1 and Day 2 convective outlooks to present a probability of hail exceeding 3/4 inch, convective winds greater than 60 mph, and tornadoes within 25 miles of a point on three separate graphics. Probabilities for “significant severe” would also be displayed. A text discussion will accompany the graphics. SPC would like to present examples of probabilistic outlooks in comparison to standard (current) convective outlooks to obtain feedback and further customize/modernize the proposed product suite.

Additional information regarding experimental probabilistic outlooks can be obtained from the SPC Web page at: <http://www.spc.noaa.gov/products/outlook/probinfo.html>.

Impacts/Input

We would appreciate feedback regarding the following questions. You might have additional areas of concern which we would be pleased to address.

- ▶ Is there a need for the SPC to include more graphical descriptions of specific severe weather threats using probability in convective outlooks?
- ▶ If adopted, should probabilistic outlooks be created for Day 1 as well as Day 2 products (given that confidence in Day 2 forecasts are often considerably lower than Day 1)?
- ▶ Do probabilities describing “an event occurring within 25 miles of a point” adequate for describing the potential for a severe weather outlook?
- ▶ Would users be interested in SPC pursuing probabilities of severe weather elements in convective watch products?
- ▶ What additional graphical and text enhancements to the SPC convective outlook product suite would users like to see implemented in the coming years (e.g. enhanced time resolution, other options for describing outlook areas, etc.)?